

4/7 - (C) WPI / DERWENT

AJ - 98-138246 [13]

AP - JP960195360 960705

PR - JP960195360 960705

TI - Detecting point mutation in exon 4 of human cytochrome P450 2C19 gene - comprises carrying out PCR using specific oligo:nucleotide primers, useful for, e.g. detecting abnormalities in S-mephenytoin metabolism

IW - DETECT POINT MUTANT HUMAN CYTOCHROME GENE COMPRISE CARRY SPECIFIC OLIGO NUCLEOTIDE PRIME USEFUL DETECT ABNORMAL METABOLISM  
PA - (SRLS-N) SRL KK

PN - JP10014585 A 980120 DW9813 C12N15/09 005pp

IC - C07H21/04 ; C12N15/09 ; C12Q1/68

AB - J10014585 The following are claimed: (1) oligonucleotide primers (I) and (II), for testing a point mutation m2 in exon 4 of a human cytochrome P450 2C19 gene: AACATCAGGA TTGTAAGCAC (I) TCAGGGCTTG GTCAATATAG (II) (2) a method for detecting the point mutation as in (1) by: (a) carrying out a PCR using (I) and (II) primers, and a human cytochrome P450 2C19 gene as a template, and (b) analysing the resultant PCR product with a restriction fragment length polymorphism (RFLP) prepared by treating with BamHI, and (3) a method similar to (2), but where a point mutation is 1 in exon 5 of the human cytochrome P450 2C19 gene and the primers are (III) and (IV): AATTACAACC AGAGCTTGGC (III) TATCACTTTC CATAAAAGCA (IV)

- USE - The primers and the methods may be used for detection of, e.g. abnormal metabolism of (S)-mephenytoin, and disturbances in the metabolism of diazepam, imipramine, omeprazole and propranolol.

- ADVANTAGE - The methods allow simultaneous detection of point mutations of m1 and m2 under the identical PCR conditions.

- (Dwg.0/2)